a.) Amendment to the Claims

1. (Currently Amended and withdrawn) An Hsp90 family protein inhibitor comprising, as an active ingredient, A method of inhibiting a heat shock protein 90 family protein, which comprises administering to a patient, in need thereof, an effective amount of a benzene derivative represented by formula (I):

$$R^3$$
 R^4
 R^5
 R^5
 R^6
 $(CH_2)_nR^1$

{wherein

n represents an integer of 0 to 10;

R¹ represents a hydrogen atom, a hydroxy, a cyano, a carboxy, a nitro, a halogen, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted aroyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted heterocyclic group, -CONR⁷R⁸ (wherein R⁷ and R⁸, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted or unsubstituted lower alkyl, a

- 2 -

substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl a substituted or unsubstituted heterocyclic-alkyl or a substituted or unsubstituted aroyl, or R⁷ and R⁸ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom), -NR⁹R¹⁰ [wherein R⁹ and R¹⁰, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkylsulfonyl, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aroyl, or -CONR¹¹R¹² (wherein R¹¹ and R¹² have the same meanings as the above R⁷ and R⁸, respectively), or R⁹ and R¹⁰ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom], or -OR¹³ (wherein R¹³ represents a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl or a substituted or unsubstituted heterocyclic-alkyl);

R² represents a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted aryl or a substituted or unsubstituted heterocyclic group (but excepting a substituted or unsubstituted pyrazolyl);

R³ and R⁵, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkylsulfonyl, a substituted or

unsubstituted arylsulfonyl, a carbamoyl, a sulfamoyl, a substituted or unsubstituted lower alkylaminocarbonyl, a substituted or unsubstituted di-lower alkylaminocarbonyl, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted heterocyclic-carbonyl, a substituted or unsubstituted aralkyl or a substituted or unsubstituted aroyl; and

R⁴ and R⁶, which may be the same or different, each represent a hydrogen atom, a hydroxy, a halogen, a cyano, a nitro, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted cycloalkyl, an amino, a lower alkylamino, a di-lower alkylamino, a carboxy, a substituted or unsubstituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted aryloxy, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group (but excepting a substituted or unsubstituted pyrazolyl), a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted or unsubstituted heterocyclic-alkyl}, or

a prodrug thereof, or a pharmaceutically acceptable salt thereof.

2. (Currently Amended and withdrawn) An Hsp90 family protein inhibitor comprising, as an active ingredient, A method of inhibiting a heat shock protein 90 family protein, which comprises administering to a patient, in need thereof, an effective amount of a benzene derivative represented by general formula (I):

$$R^3$$
 R^4
 R^5
 R^5
 R^6
 R^6
 R^1
 R^1

(wherein

n represents an integer of 0 to 10;

R¹ represents a hydrogen atom, a hydroxy, a cyano, a carboxy, a nitro, a halogen, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted aroyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted heterocyclic group, -CONR⁷R⁸ (wherein R⁷ and R⁸, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl a substituted or unsubstituted heterocyclic-alkyl or a substituted or unsubstituted aroyl, or R⁷ and R⁸ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom), -NR⁹R¹⁰ [wherein R⁹ and R¹⁰, which may be the same or different, each represent a hydrogen atom, a substituted or

- 5 -

unsubstituted lower alkylsulfonyl, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aroyl, or -CONR¹¹R¹² (wherein R¹¹ and R¹² have the same meanings as the above R⁷ and R⁸, respectively), or R⁹ and R¹⁰ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom], or -OR¹³ (wherein R¹³ represents a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl or a substituted or unsubstituted heterocyclic-alkyl);

R² represents a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted aryl or a substituted or unsubstituted heterocyclic group (but excepting a substituted or unsubstituted pyrazolyl);

R³ and R⁵, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkylsulfonyl, a substituted or unsubstituted arylsulfonyl, a carbamoyl, a sulfamoyl, a substituted or unsubstituted lower alkylaminocarbonyl, a substituted or unsubstituted di-lower alkylaminocarbonyl, a substituted or unsubstituted or unsubstituted heterocyclic-carbonyl, a substituted or unsubstituted aralkyl or a substituted or unsubstituted or unsubstituted aralkyl or a substituted or unsubstituted aralkyl or a substituted or unsubstituted aroyl; and

R⁴ and R⁶, which may be the same or different, each represent a hydrogen atom, a hydroxy, a halogen, a cyano, a nitro, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted cycloalkyl, an amino, a lower alkylamino, a di-lower alkylamino, a carboxy, a substituted or unsubstituted or unsubstituted or unsubstituted aryloxy, a substituted or unsubstituted aryloxy, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group (but excepting a substituted or unsubstituted pyrazolyl), a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aralkyl, or a substituted or unsubstituted heterocyclic-alkyl}) or a pharmaceutically acceptable salt thereof.

- 3. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 2 The method according to claim 2, wherein R¹ is a hydrogen atom, a hydroxy, a cyano, a carboxy, a nitro, a halogen, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted lower alkoxy, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted lower alkanoyloxy, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aryl, a substituted or unsubstituted aryl, a substituted or unsubstituted aryl, a substituted or unsubstituted arylsulfonyl, -CONR⁷R⁸ or -NR⁹R¹⁰.
- 4. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 2 The method according to claim 2, wherein R¹ is a substituted

or unsubstituted lower alkyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted lower alkoxy, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted or unsubstituted aryl, -CONR⁷R⁸, or -NR⁹R¹⁰.

- 5. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 3 or 4 The method according to claim 3 or 4, wherein R² is a substituted or unsubstituted aryl, or a substituted or unsubstituted aromatic heterocyclic group.
- 6. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 3 or 4 The method according to claim 3 or 4, wherein R² is a substituted or unsubstituted aryl.
- 7. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 3 or 4 The method according to claim 3 or 4, wherein R² is a substituted or unsubstituted phenyl.

- 8. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 3 or 4 The method according to claim 3 or 4, wherein R² is a substituted or unsubstituted furyl.
- 9. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 1 or 2 The method according to claim 1 or 2, wherein R⁴ is a hydrogen atom, a hydroxy, or a halogen.
- 10. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 1 or 2 The method according to claim 1 or 2, wherein R³ and R⁵, which may be the same or different, each are a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted aroyl, a substituted or unsubstituted lower alkylaminocarbonyl, a substituted or unsubstituted di-lower alkylaminocarbonyl, a substituted or unsubstituted di-lower alkylaminocarbonyl, a substituted lower alkoxycarbonyl, or a substituted or unsubstituted heterocyclic-carbonyl.
- 11. (Currently Amended and withdrawn) The Hsp90 family protein inhibitor according to claim 1 or 2 The method according claim 1 or 2, wherein R^3 , R^4 and R^5 are hydrogen atoms.

12. (Currently Amended) A benzene derivative represented by general formula (IA):

$$R^{3A}$$
 R^{4A}
 R^{5A}
 R^{5A}
 R^{6A}
 R^{6A}
 R^{6A}
 R^{6A}
 R^{6A}

[wherein R^{2A} represents a substituted or unsubstituted aryl, or a substituted or unsubstituted aromatic heterocyclic group (but excepting a substituted or unsubstituted phenyl) a substituted or unsubstituted phenyl;

R^{3A} and R^{5A}, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkanoyl, a carbamoyl, a sulfamoyl, a substituted or unsubstituted lower alkylsulfonyl, a substituted or unsubstituted lower alkylaminocarbonyl, a substituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted heterocyclic-carbonyl, a substituted or unsubstituted aralkyl, or a substituted or unsubstituted or unsubstituted aralkyl, or a substituted or unsubstituted aroyl;

R^{4A} represents a hydrogen atom, a hydroxy, or a halogen;

nA represents an integer of 0 to 5;

provided that;

(1) when nA is 0,

then R^{1A} is a hydrogen atom, a methyl, a hydroxy, a methoxy, a carboxyl, a methoxycarbonyl, a carbamoyl, -CONHCH₃, -CON(CH₃)₂, -CONHCH₂Ph (wherein Ph represents a phenyl), -CH(OCH₃)Ph (wherein Ph has the same meaning as that defined above), a propionyl, a benzoyl, a dioxolanyl, a substituted or unsubstituted vinyl, or a substituted or unsubstituted prop-1-en-1-yl;

and when R^{1A} is a hydrogen atom,

then R^{6A} is a substituted or unsubstituted lower alkyl;

when R^{1A} is a methyl, a hydroxy, a methoxy, a carboxyl, a methoxycarbonyl, a carbamoyl, -CONHCH₃, -CON(CH₃)₂, -CONHCH₂Ph (wherein Ph has the same meaning as that defined above), a propionyl, a benzoyl, a dioxolanyl, a substituted or unsubstituted vinyl, or a substituted or unsubstituted prop-1-en-1-yl,

then R^{6A} is a halogen;

(2) when nA is an integer of 1 to 5,

then R^{1A} is a hydroxy, a cyano, a carboxyl, a halogen, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or unsubstituted aryl, a substituted or unsubstituted aroyl, a substituted or

unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted heterocyclic group, -CONR⁷R⁸ (wherein R⁷ and R⁸, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl a substituted or unsubstituted heterocyclic-alkyl or a substituted or unsubstituted aroyl, or R⁷ and R⁸ form a substituted or unsubstituted heterocyclic group together with the adjacent nitrogen atom), -NR⁹R¹⁰ (wherein R⁹ and R¹⁰, which may be the same or different, each represent a hydrogen atom, a substituted or unsubstituted lower alkylsulfonyl, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heterocyclic-alkyl, a substituted or unsubstituted aroyl), or -OR¹³ (wherein R¹³ represents a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, a substituted or unsubstituted aralkyl or a substituted or unsubstituted heterocyclic-alkyl), R^{6A} is a hydrogen atom, a halogen, a cyano, a nitro, a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkynyl, a substituted or unsubstituted lower alkoxy, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted lower alkanoyl, an amino, a lower alkylamino, a di-lower alkylamino, a carboxy, a substituted or unsubstituted lower alkoxycarbonyl, a substituted or

unsubstituted aryloxy, a substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group (but excepting a substituted or unsubstituted pyrazolyl), a substituted or unsubstituted aralkyl, or a substituted or unsubstituted heterocyclic-alkyl;

and provided that;

(i) when R^{3A} and R^{5A} are isopropyl,

then R^{6A} is not a hydrogen atom;

(ii) when R^{3A} and R^{5A} are methyl,

then R^{6A} is not a group selected from a hydrogen atom, a bromo, an ethyl, a 1-hydroxyethyl, a 1-(dimethylamino)ethyl, a vinyl and a carboxy;

 $\mbox{(iii) when } R^{4A} \mbox{ and } R^{6A} \mbox{ are hydrogen atoms, and when } R^{3A} \mbox{ and } R^{5A} \mbox{ are the}$ same and are tert-butyl or benzyl,

 $\mbox{then -}(CH_2)_{nA}R^{1A} \mbox{ is not a group selected from a hydroxymethyl and a 2-chloroallyl;}$

 $\mbox{(iv) when } R^{4A} \mbox{ and } R^{6A} \mbox{ are hydrogen atoms, and when } R^{3A} \mbox{ is a benzyl or an}$ acetyl and $R^{5A} \mbox{ is a methyl,}$

or when $R^{3A},\,R^{4A}$ and R^{6A} are hydrogen atoms, and when R^{5A} is a methyl,

then $-(CH_2)_{nA}R^{1A}$ is not a group selected from a 2-(acetylamino)propyl and a 2-(substituted lower alkanoylamino)propyl;

 $(v) \ when \ R^{3A}, \ R^{4A} \ and \ R^{5A} \ are \ hydrogen \ atoms, \ and \ when \ R^{6A} \ is \ a \ carboxy,$ or when R^{4A}, R^{5A} and R^{6A} are hydrogen atoms, and when R^{3A} is a methyl,

then $-(CH_2)_{nA}R^{1A}$ is not an n-pentyl;

 $\mbox{(vi) when } R^{3A} \mbox{ and } R^{4A} \mbox{ are hydrogen atoms, } R^{5A} \mbox{ is a methyl, and } R^{6A} \mbox{ is an }$ ethyl,

then $-(CH_2)_{nA}R^{1A}$ is not an n-propyl;

 $\mbox{(vii) when } R^{3A} \mbox{ is a methyl, } R^{4A} \mbox{ and } R^{6A} \mbox{ are hydrogen atoms, and } R^{5A} \mbox{ is a 4-} \\ \mbox{methoxybenzyl,}$

 $\mbox{then -}(CH_2)_{nA}R^{1A} \mbox{ is not a group selected from -}(CH_2)_3CH=\!CH_2 \mbox{ and -} \\ (CH_2)_5CH=\!CH_2;$

 $\mbox{(viii) when } R^{3A}, R^{4A}, R^{5A} \mbox{ and } R^{6A} \mbox{ are hydrogen atoms, and when -}$ $\mbox{(CH$_2$)$}_{nA} R^{1A} \mbox{ is}$

(a) an n-pentyl,

then R^{2A} is not a 2,4-dihydroxy-6-pentylphenyl,

(b) an n-hexyl,

then R^{2A} is not a group selected from a 4,6-di(substituted phenyl)triazol-2-yl and a 3,6-di(substituted phenyl)-1,2,4-triazin-5-yl,

(c) an n-heptyl,

then R^{2A} is not a substituted triazolyl;

(ix) when R^{3A} is a hydrogen atom or an acetyl, R^{5A} is a methyl, and R^{4A} and R^{6A} are hydrogen atoms, and when $(CH_2)_{nA}R^{4A}$ is an ethyl or an n-propyl,

then R^{2A} is not a 2-aminopyrimidin-4-yl having a substituent at the 5-position thereof,

(x) when R^{3A} , R^{4A} and R^{5A} are hydrogen atoms, R^{6A} is a methoxy, and (CH₂)_{nA} R^{4A} is a 3-methylbut-2-en-1-yl, or a 3-hydroxy-3-methylbutyl,

then R^{2A} is not a group selected from a 7-hydroxy-4-oxo-4H-1-benzopyran-3-yl and a 6-methoxy-2,2-dimethyl-2H-1-benzopyran-8-yl],

or a pharmaceutically acceptable salt thereof.

- 13. (Currently Amended) The benzene derivative according to claim 12, wherein R^{2A} is a substituted or unsubstituted phenyl, or a pharmaceutically acceptable salt thereof.
- 14. (Currently Amended) The benzene derivative according to claim 12, wherein R^{2A} is a substituted or unsubstituted furyl phenyl, or a pharmaceutically acceptable salt thereof.

- 15. (Original) The benzene derivative according to any of claims 12 to 14, wherein R^{3A} and R^{5A}, which may be the same or different, each are a hydrogen atom, a substituted or unsubstituted lower alkanoyl, a substituted or unsubstituted aroyl, a substituted or unsubstituted lower alkenyl, a substituted or unsubstituted lower alkylaminocarbonyl, a substituted or unsubstituted di-lower alkylaminocarbonyl, a substituted or unsubstituted or unsubstituted heterocyclic-carbonyl, or a pharmaceutically acceptable salt thereof.
- 16. (Original) The benzene derivative according to any of claims 12 to 14, wherein R^{3A}, R^{4A} and R^{5A} are hydrogen atoms, or a pharmaceutically acceptable salt thereof.
- 17. (Original) The benzene derivative according to any of claims 12 to 14, wherein nA is an integer of 1 to 5, or a pharmaceutically acceptable salt thereof.
- 18. (Previously Presented) A pharmaceutical composition comprising, as an active ingredient, the benzene derivative according to any of claims 12 to 14 or a pharmaceutically acceptable salt thereof together with a pharmaceutically acceptable carrier.

Claims 19-26 (Cancelled).

27. (Withdrawn and Currently Amended) A method of inhibiting a heat shock protein 90 family protein, which comprises administering an effective amount of a said benzene derivative according to any one of claims 1-4, or a prodrug or a pharmaceutically acceptable salt thereof, to a patient in need thereof or 12-14.

Claims 28-41 (Cancelled).

- 42. (New) A method of inhibiting a heat shock protein 90 family protein, which comprises administering said prodrug according to claim 1.
- 43. (New) A method of inhibiting a heat shock protein 90 family protein, which comprises administering said pharmaceutically acceptable salt according to any one of claims 1-4 or 12-14.